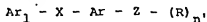


19. The process of Claim 15 wherein the compounds of Formula 1 are:



and salts thereof;  
wherein

$\text{Ar}_1$  is a phenyl or naphthyl group;

$\text{Ar}$  is a phenyl group;

$\text{X} = -\text{O}(\text{CHR}_1)_n-, -\text{S}(\text{CHR}_1)_n-, -\text{NR}_2(\text{CHR}_1)_n-, \text{alkylene}$   
 $(\text{O})_n$

of up to 2 carbon atoms in the principal chain and up to a total of 4 carbon atoms;  $-\text{C}(\text{R}_1)=\text{C}(\text{R}_1)-$ ,  $-\text{C}\equiv\text{C}-$ ,  $-\text{CH}=\text{N}-$ ,

$-\text{C}-\text{N}(\text{R}_1)-$ ;  
 $\text{O}$

$\text{Z}$  is alkylene chain containing up to 10 carbon atoms in the principal chain and a total of up to 12 carbon atoms and from 0 to 2 double bonds and the

each  $\text{R}$  is a substituent, attached to one of the carbon atoms of  $\text{Z}$  selected from the group consisting of  $=\text{O}$ ,  $\text{OR}_3$ ,  $\text{N}(\text{R}_2)_2$  and  $-\text{COR}_4$ ;

$\text{R}_1$  is  $\text{H}$  or  $\text{CH}_3$ ;

$\text{R}_2$  is  $\text{H}$ , lower alkyl, aryl or aralkyl;

$\text{R}_3$  is  $\text{H}$ , lower alkyl, lower alkanoyl, aryl or aralkyl and said 0-heterocyclic group is a pyran group or tetrahydropyran group;

$\text{R}_4$  is  $\text{OR}_2$  or  $\text{N}(\text{R}_2)_2$ ;

$n = 0$  or  $1$ ;

$n' = 1$  to  $7$ ; and

$n'' = 0, 1$  or  $2$ .

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C 07 D 213/79, C 07 C 43/23,  
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C 07 C 69/76, C 07 C 121/75,  
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71 Applicant: USV PHARMACEUTICAL CORPORATION, 1  
Scarsdale Road, Tuckahoe New York (US)

72 Inventor: Musser, John H., 1009 Millstream Road,  
Malvern Pennsylvania (US)  
Inventor: Chakraborty, Utpal Ranjan, 51 Minuteman  
Circle, Orangeburg New York (US)

74 Representative: Patentsanwälte Grünecker, Dr.  
Kinkeldey, Dr. Stockmair, Dr. Schumann, Jakob, Dr.  
Bezdol, Maletier, Hilgers, Dr. Meyer-Plath,  
Maximilianstrasse 58, D-8000 München 22 (DE)

24 Anti-inflammatory/anti-allergic compounds.

27 Compounds of the formula:

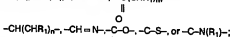
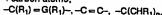


and salts thereof, wherein  $Ar_1$  is a nitrogen, sulfur, oxygen heterocyclic ring or aromatic ring;

$Ar$  is a phenyl ring or a nitrogen, oxygen or sulfur heterocyclic ring;

$Ar$  and  $Ar_1$  may be fully substituted or less than fully substituted with H,  $CH_3$ , lower alkyl, aryl, aralkyl, halo, hydroxy, lower alkoxy,  $CF_3$ , carboxy, alkylcarboxy, arylcarboxy, alkylcarbalkoxy, alkanoxy, formyl, oxo, nitro, amino, aminoalkyl, alkylamine, carbamate, aryloxy, nitro, sulfonyl, sulfonamide, thio, or alkylthio;  
 $X = -O(CHR_1)_{n-1} - S(CHR_1)_{n-1} - NR_2(CHR_1)_n -$  alkylene

wherein  $(O)_{n-1}$  is of up to 2 carbon atoms in the principal chain and up to a total of 4 carbon atoms.



$Z$  is an alkylene chain containing up to 10 carbon atoms in the principal chain and a total of up to 12 carbon atoms and from 0 to 2 double bonds and the said alkylene chain may be attached

to  $Ar$  through an oxygen, sulfur or amino nitrogen atom, and when  $n' = 2$ , one of the  $R$  substituents may be halogen on an omega carbon of the alkylene chain  $Z$ ;

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# EUROPEAN SEARCH REPORT

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Application Number

EP 85 11 3830

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
E	EP-A-0 223 368 (AMERICAN HOME PRODUCTS) * example 16 * ---	1 - 19	C 07 D 215/14 C 07 D 213/30 C 07 D 213/79 C 07 C 43/23 C 07 C 49/76 C 07 D 215/22 C 07 D 213/84 C 07 C 65/21 C 07 C 69/76 C 07 C 121/75 C 07 C 47/575 A 61 K 31/47 A 61 K 31/44 A 61 K 31/34 A 61 K 31/38 A 61 K 31/085 A 61 K 31/12 -/-
E	EP-A-0 219 307 (MERCK FROSST) * examples 1 - 11 * ---	1 - 19	
E	EP-A-0 206 772 (DUPONT) * tables II, III, etc * ---	1 - 19	
E	EP-A-0 206 751 (MERCK FROSST) * tables I, II, III, examples * ---	1 - 19	
E	EP-A-0 200 101 (USV) * examples * ---	1 - 19	
E	EP-A-0 194 579 (HOECHST) * examples 4a, 6a, 11 * ---	1 - 19	
E	EP-A-0 190 722 (USV) * examples 1 - 7, 10 - 16; 1st page 25 ---	1 - 19	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
E	EP-A-0 173 172 (HOECHST) * pages 11, 12; examples; table II * ---	1 - 19	C 07 D 213/00 C 07 D 215/00 C 07 D 307/00 C 07 D 333/00 C 07 C 43/00
E	EP-A-0 169 581 (BOEHRINGER) * examples * ---	1 - 19	
P,X	EP-A-0 153 678 (TENAKE) * table 1 (compounds 1, 5); examples 1, 2, 10, 11; reference example 1 * ---	1 - 19	
P,X	DE-A-3 442 034 (OTSUKA) * examples 6, 18, 19, 37, 44 * --- -/-	1 - 19	
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 19-12-1988	Examiner LEONARD
CATEGORY OF CITED DOCUMENTS			
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
P, X	US-A-4 520 199 (KOHN) * examples 1 - 4; table A *	1 - 19	A 61 K 31/19 A 61 K 31/235 A 61 K 31/165 A 61 K 31/275
P, X	EP-A-0 142 328 (DOW) * examples 1(F), 2, 3, 4(C), 5(E), 5(F), list on pages 19, 20 *	1 - 19	
X	US-A-4 469 872 (ANDERSON) * examples 1 - 10; table B *	1 - 19	
X	DE-A-3 405 395 (YAMADA) * compounds no. 4 (page 21), 8 (page 23) *	1 - 19	
X	US-A-4 464 533 (KRASS) * column 3, lines 29, 30 *	1 - 19	
X	US-E- 31 624 (DEWHIRST) * whole document, especially example 3 *	1 - 19	
X	EP-A-0 110 405 (USV) * whole document, especially examples *	1 - 19	TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
X	EP-A-0 109 483 (ZOECON) * examples, tables *	1 - 19	
X	FR-A-2 534 582 (KOTOKUKI) * examples; list pages 2 - 4 *	1 - 19	
X	EP-A-0 098 751 (ICI AUSTRALIA) * tables; list pages 6 - 7 *	1 - 19	
X	GB-A-2 119 801 (HOFFMANN) * examples *	1 - 19	
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
BERLIN		19-12-1988	LEONARD
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Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT				
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)	
X	EP-A-0 086 375 (CELAMERCK) * examples; lists *	1 - 19		
X	WO-A-8 204 045 (MAX PLANCK) * compounds on pages 6, 7, 9 *	1 - 19		
X	EP-A-0 063 418 (ICI) * examples; tables *	1 - 19		
X	DE-A-3 101 544 (HOECHST) * examples; tables *	1 - 19		
X	PATENT ABSTRACTS OF JAPAN vol. 6, no. 102 (C-107) (980), 11th June 1982; & JP - A - 57 32279 (MITSUBISHI), 20-02-1982 * whole document *	1 - 19		
X	US-A-4 325 729 (REMPFLER) * examples *	1 - 19		
X	US-A-4 287 335 (ICHIMURA) * examples; tables *	1 - 19		TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
X	DE-A-3 006 351 (BASF) * examples *	1 - 19		
X	EP-A-0 041 476 (CIBA-GEIGY) * examples *	1 - 19		
X	EP-A-0 034 349 (TENAKE) * whole document, especially examples *	1 - 19		
X	EP-A-0 029 319 (ICI AUSTRALIA) * examples *	1 - 19		
-/-				
The present search report has been drawn up for all claims				
Place of search BERLIN		Date of completion of the search 19-12-1988	Examiner LEONARD	
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Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT				
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)	
X	PATENT ABSTRACTS OF JAPAN vol. 5, no. 8 (C-39) (680), 20th January 1981; JP - A - 13 6265 (KOGYO GIJUTSUIN), 23-10-1980 * formulae I, II *	1 - 19		
X	US-A-4 255 585 (THUILLIER) * examples *	1 - 19		
X	US-A-4 236 912 (JOHNSTON) * examples *	1 - 19		
X	GB-A-2 042 539 (NISSAN) * examples *	1 - 19		
X	GB-A-2 030 131 (TEIJO) * formula VII; examples *	1 - 19		
X	FR-A-2 426 045 (MEIJI) * example 3 *	1 - 19		
X	FR-A-2 417 488 (KUMIAI) * examples *	1 - 19		TECHNICAL FIELDS SEARCHED (Int. Cl.4)
X	EP-A-0 003 532 (BYK GULDEN) * examples *	1 - 19		
X	EP-A-0 002 408 (SOCIETE DE RECHERCHES INDUSTRIELLES) * examples, table *	1 - 19		
X	US-A-4 145 354 (MOOKHERGEE) * columns 1, 2, examples 1, 2 *	1 - 19		
X	CH-A- 603 638 (CIBA-GEIGY) * examples *	1 - 19		
		-/-		
The present search report has been drawn up for all claims				
Place of search BERLIN		Date of completion of the search 19-12-1988	Examiner LEONARD	
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : member of the same patent family, corresponding document</p>				

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
X	DE-A-2 756 771 (CIBA-GEIGY) * claims, examples *	1 - 19	
X	US-A-4 053 607 (THORNE) * column 9 et seq.; compounds 16 - 32, 39, 42; examples *	1 - 19	
X	US-A-4 024 273 (BRENNER) * examples *	1 - 19	
X	DE-A-2 647 907 (ELI LILLY) * tables; lists *	1 - 19	
X	US-A-4 017 632 (THUILLIER) * examples *	1 - 19	
X	DE-A-2 640 430 (SMITHKLINE) * page 2; examples *	1 - 19	
X	US-A-3 947 470 (BRENNER) * examples *	1 - 19	
X	DE-A-2 522 655 (LABAZ) * examples *	1 - 19	
X	DE-A-2 415 867 (MERCK PATENT) * examples *	1 - 19	
X	GB-A-1 357 212 (LABAZ) * list, pages 2 - 3, examples *	1 - 19	
X	DE-A-2 350 148 (ROUSSEL-UELAF) * whole document, especially examples *	1 - 19	TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
X	US-A-3 793 328 (HESTER) * listed compounds in column 2; examples 2, 3 *	1 - 19	
		-/-	
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 19-12-1988	Examiner LEONARD
CATEGORY OF CITED DOCUMENTS			
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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	DE-B-1 939 809 (THOMAE) * whole document, especially list on page 9; examples *	1 - 19	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
X	SYNTHESIS no. 11, 1976, pages 764 - 765; G. COUDERT et al.: "Synthesis of 2-(2-Oxoalkyl)-quinolines and 4-(2-Oxoalkyl)-quinolines" * compounds 6(t), 7(t) *	1 - 19	
X	JOURNAL OF MEDICINAL CHEMISTRY vol. 14, no. 3, 1971, pages 198 - 202; A.R. PATEL et al.: "Some New alpha-Alkylaminomethyl-4-quinolinemethan ols" * lists; tables *	1 - 19	
X	JOURNAL OF MEDICINAL CHEMISTRY vol. 15, no. 1, 1972, pages 45 - 48; M. NAKANISHI et al.: "1-Amino-3-phenoxy-2-propanol Derivatives as beta-Adrenergic Blocking Agents" * tables *	1 - 19	
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 19-12-1988	Examiner LEONARD
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediato document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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